

MASIAR, P.

On haemoglobin, Part 8: Similarities and differences in several histidine peptides isolated from human, rat and horse haemoglobin. Coll Cz Chem 26 no.8:1967-1975 '61.

1. Department of Biochemistry, Medical Faculty, P.J.Safarik University, Kosice.

MASIAR, P.; NICAĀ, A.

On protistocidin. Coll. Cs. Chem. 26 no. 9: 2259-2265 '61.

1. Department of Biochemistry and Department of Pharmacology, P. J. Safarik University, Kosice.

(Biological chemistry) (Coenobitic plants)

MASIAR, P.; MURAR, J.

Investigation of hemoglobin biosynthesis in rat reticulocytes. Coll
Cz Chem 26 no.10:2562-2569 0 '61.

1. Institute of Biochemistry, Faculty of Medicine, P. J. Safarik Uni-
versity, Kosice.

MASIAR, P.; MURAR, J.

Ununiform incorporation of 1-C¹⁴-alanine into rat hemoglobin in vitro.
Preliminary communication. Bratisl. lek. listy 41 no.9:532-536 '61.

1. Z Katedry biochemie Lek. fak. Univ. P. J. Safarika v Kosiciach,
veduci doc. MUDr. P. Masiar.

(HEMOGLOBIN chem) (ALANINE chem)

MASIAR, P.; VNEK, J.

On isolation and crystallization of hemoglobin from *Macaca rhesus* monkeys. Bratisl. Lek. Listy 1 no.3:129-134 '62.

1. Z Katedry biochemie Lek. fak. Univ. P. J. Safarika v Kosiciach, veduci doc. MUDr. P. Masiar.

(HEMOGLOBIN chem) (MONKEYS blood)

MÁSIAR, P., Docent MUDr.

Czechoslovakia

Chair of Biochemistry of the Medical Faculty of
the University P. J. Šafárika -- Košici
(Katedra biochémie Lek. fak. Univ. P. J. Šafárika
v Košiciach); Director: P. MÁSIAR, Docent MUDr.

Bratislava, Bratislavské Lekárske Listy, No 6, 1962,
pp 338-346

"On Hemoglobin XV. Electrophoretic and Electro-
chromatographic Studies of the Enzymatic Hydroly-
sates of the Protein Component of Human and Monkey
Hemoglobin (of Macacus rhesus)."

MURAR, J.; MASIAR, P.

On hemoglobin biosynthesis. Part 2 : Incorporation of ^{14}C -leucine into rat hemoglobin in vitro. Coll Cz Chem 27 no.2:504-506 . '62.

1. Department of Biochemistry, Faculty of Medicine, P.J. Safarik University, Kosice.

TELEHA, M.; MASIAR, P.

On hemoglobin. Part 13: Peptide structures around arginine and lysine residues in the molecule of some mammalian hemoglobins and the liberation of the peptide bonds by the action of trypsin. Coll Cs Chem 27 no.5:1284-1291 My '62.

1. Department of Biochemistry, Medical Faculty of the P. J. Safarik University, Kosice.

MASIAR, P.

On hemoglobin. Part 9: Sequence of highly basic histidine peptides isolated from tryptic hydrolyzate of monkey, cat and pig hemoglobin. Coll Cs Chem 27 no.7:1598-1603 JI '62.

1. Department of Biochemistry, P.J. Safarik University, Kosice.

MASIAR, P.; SMOLNICKY, T.

On hemoglobin. Part 14 : Investigation on the neutral and weakly basic fraction of the tryptic digest of human and horse hemoglobin by chromatography on zerotit 225 and high-voltage electrophoresis. Coll Cz Chem 27 no.8:2018-2019 Ag '62.

1. Department of Biochemistry, P.J. Safarik University, Kosice.

MASTAR, P.; TELEHA, M.; VNEK, J.

CSSR

no academic degrees indicated

Department of Biochemistry, Medical Faculty, P.J. Safarik University, Kosice
(for all)

Prague, Collection of Czechoslovak Chemical Communications, No 1, 1963,
pp 271-274

"On Hemoglobin. XVIII. Several Corresponding Peptides Isolated from Tryptic
Hydrolysates of the α -chains of Human and Monkey Hemoglobin"

(3)

MASIAR, P.; MURAR, J.; BLAHOVEC, J.

Nonuniform incorporation of leucine-1-¹⁴C into the α and β chains of rat hemoglobin. Coll Cz Chem 28 no.10:2806-2807 0 '63.

1. Institute of Biochemistry, Medical Faculty, University of P.J. Safarik Kosice.

L 20855-66 T RM/JK

ACCESSION NR: AP5023873

CZ/0049/64/000/011/0879/0879

AUTHOR: Masiar, Pavel

TITLE: Opening of the Institute for Experimental Biology of the Slovak Academy of Sciences at Kosice 9

SOURCE: Biologia, no. 11, 1964, 879

TOPIC TAGS: biology, biologic research facility, biochemistry, animal physiology, protein, agriculture science, radiobiology

ABSTRACT: The institute started operations on 30 May 1964. It will be known as "UEB" and its activity will cover three main fields. 1. Basic research into physiology of domestic animals to achieve an increase in agricultural production. 2. Basic research in radiobiology to increase vegetation production and protect animal organisms against the influence of acute and chronic radiation. 3. Basic research in biochemistry of proteins, mainly biologically modified proteins. The institute should become the hub for the research at local colleges and specialized institutions in its area.

Card 1/2

L 20855-66

ACCESSION NR: AP5023873

ASSOCIATION: none

SUBMITTED: 09 Jul 64

NR REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: LS

JFRS

Card 2/2

TJUTCEV, N.; MASIAR, P.

The metabolism of protein substances in muscle tissue; a study of ninhydrinpositive substances isolated from nonprotein extracts from the heart of normal rats. *Physiol. Bohemoslov.* 13 no.6:565-570 '64

1. Department of Biochemistry, Medical Faculty, Safarik University, Kosice.

MASIAR, Pavel; TJUTCEV, Nikita

Metabolism of protein substances in muscle tissue. II, Review of ninhydrin-positive substances in protein-free extracts from muscles of *Macaca rhesus* monkeys. *Biologia (Bratisl.)* 19 no.6:446-453 '64.

1. Katedra biochemie Lekarskej fakulty Univerzity P.J. Safarika v Kosiciach.

MURAR, Jozef; SOVA, Otto; BABJAK, Miron; MASIAR, Pavol

Contribution to the study of the blood protein picture of various mammals with paper electrophoresis. Biologia (Bratisl.) 19 no.12:897-903 '64

1. Katedra biochemie Lekarskej fakulty Univerzity P.J.Safarika v Kosiciach.

MASJAR, P.; SOFRANKOVA, A.; PALGUTOVA, M.

Application of Sephadex G 25 and G 50 to the fractionation of the peptic hydrolyzate of the globulin fraction of horse antitetanic serum. Coll Cz Chem 29 no.10:2574-2576 0 '64.

1. Department of Biochemistry, P.J. Sařarik University, Kosice.

CZECHOSLOVAKIA

MASIAR, P.; SOFRANKOVA, A.

Department of Biochemistry, Faculty of Medicine,
Safarik University, Kosice - (for both).

Prague, Collection of Czechoslovak Chemical Commu-
cations, No 11, November 1965, pp 3760-3765.

"Fractionation of a peptic digest of horse plasma
globulins by gel filtration through different types
of sephadex."

MÁSIAR, P.

Separation of a mixture of amino acids and peptides on DEAE
Sephadex A 50. Bratisl. lek. listy 45 no.9:531-538 15 N '65.

1. Katedra biochemie Lekarske fakulty Univerzity P.J. Safarika
v Kosiciach (veduci doc. MUDr. P. Másiar, CSc.).

CZECHOSLOVAKIA

UDC 616.155.76-088.7

MASIAR, P.; SOVA, O.; TJUTCEV, N.; Department of Biochemistry, Institute of Experimental Biology, Slovak Academy of Sciences (Oddelenie Biochemie Ustavu Experimentalnej Biologie SAV), Kosice, Head (Veduci) Docent Dr P. MASIAR; Chair of Biochemistry, Medical Faculty PJ Safarik University (Katedra Biochemie Lekarskej Fakulty UPJS), Head (Veduci) Dr P. MASIAR.

"Protein Metabolism. I. "

Prague, Casopis Lekarů Ceskych, Vol 105, No 33, 19 Aug 66, pp 886 - 889

Abstract [Authors' English summary modified]: During the first days of protein deficiency a systematic drop in albumins and a concurrent rise of globulin fractions occur. Quantitative changes are noticed mainly in the alpha and beta globulins, which are found in the first 20 days of protein deficiency; a new fraction corresponding to the alpha globulin appears. Gamma globulin fraction changes very little. Total nitrogen decreases to about 75% of the initial value. 3 Figures, 2 Tables, 10 Western, 4 Czech, 1 Russian, 1 Hungarian reference. (Ms. received Mar 66).
1/1

- 4 -

MASIARCZYK, HELENA
Poland/Chemical Technology - Chemical Products and Their Application. Treatment of
Natural Gases and Petroleum. Motor Fuels. Lubricants,
I-13

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62588

Author: Krupa, Marian; Masiarczyk, Helena; Palczewski, Jan

Institution: None

Title: Desulfurization of Petroleum Products Obtained from High Sulfur
Content Petroleum

Original

Periodical: Odsiarczanie produktow naftowych otrzymywanych z rop Wysokosiarkowych,
Nafta (Polska), 1956, 12, No 3, 72-76; Polish

Abstract: Considered are the presently practiced in Poland procedures for
desulfurization of petroleum products obtained from high sulfur
content petroleum and also procedures recommended for adoption in
practice: catalytic desulfurization of gasoline with the use of
decolorizing clays or bauxite, extraction of mercaptanes with soda
solution in the presence of methanol, etc.

Card 1/1

MASIBRODA, V. E.

21373

MASIBRODA, V. E. Absolyutnaya vysota turfanskoy vpadiny. (Kitaysk. Prouitsiya Sinbtszyan), Voprosy geografii, SB. 11, 1949, S. 175-78. -
Enbliogr: 9 Nazv.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

MASIBRODA, V. YE.

USSR/Geophysics - Atmospheric Circulation Mar/Apr 52

"Aeolian Relief of Turfan Depression and of Western Bey-Shan' as a Reflection of the Atmosphere's Local Circulation," V. Ye. Masibroda

"Is Ak Nauk SSSR, Ser Geograf" No 2, pp 25-35

Discusses a theory which states in essence that the forms of reliefs of sands are reflections of the atmosphere's circulation on the earth, which arise and develop under the action of turbulent motion of air masses under definite conditions of geographic setting and close interaction. States that the basic factors of relief-formation of sands are wind regimes as data

by the general conditions of the atm over the continent and orographic units. Illustrates the theory using the sands of Kum-Tag in the Turfan Depression, etc.

219760

219760

MASIBRODA, V.Ye.

Absolute elevation of Begde Ola in the eastern Tien Shan. Vop.
geog. no. 35:307-308 '54. (MLRA 7:12)
(Begde Ola)

MASIBRODA, V.Ye.

History of Chinese cartography. Vop.geog. no.42:178-188 '58.
(MIRA 11:11)

(China--Cartography)

MASIBRODA, V.Ye.

"How the map of Central Asia was made" by H.M. Shchukina. Reviewed
by V.Ye. Masibroda. Vop.geog. no.42:217-221 '58. (MIRA 11:11)
(Central Asia--Maps) (Shchukina, H.M.)

MASIC, N.

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: Not given

Affiliation: Pasteur Institute (Pasterov Zavod), Novi Sad and Department
IV, Veterinary Faculty (IV Katedra Veterinarskog Fakulteta),
Belgrade

Source: Belgrade, Acta Veterinaria, Vol 11, No 1, 1961, pp 49-54.

Data: "The Mechanism of the Infection of Cattle with the Virus
of the Aueski Disease "

24

MASIC, M.

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: None given.

Affiliation: Pasteur Institute (Pasterov Zavod), Novi Sad

Source: Belgrade, Acta Veterinaria, Vol 11, No 1, 1961, pp 79-84.

Data: "Can Swine Lice Transmit the Aueski Disease?"

Co-Author: PETROVIC, M., No academic degrees given, Department IV of the Veterinary Faculty (IV Katedra Veterinarskog Fakulteta), Belgrade

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YUGOSLAVIA

MASIC, M., and M. PETROVIC of the Pasteur Institute (Pasterov Zavod) in Novi Sad and the Fourth Department (IV. Katedra) of the Veterinary Faculty (Veterinarski Fakultet) in Belgrade.

"The Isolation and Identification of Intestinal Viruses from Domestic Hogs."

Belgrade, Acta Veterinaria, Vol 12, No 3-4, 1962, pp 5-14.

Abstract: Authors' English summary modified The authors isolated 18 cytopathogenic agents from the feces of 41 hogs from several farms in northeast Yugoslavia, using cultures of kidney tissues. The isolated agents came from younger hogs, the older ones apparently not having been exposed to viruses. The isolated agents were characterized by pronounced cytopathogenicity qualitative resistance to ether and chloroform, titer from $10^{-4.23}$ to $10^{-6.77}$ TCID₅₀, some neutralization with T-80 serum, and no effect on other animals. The conclusion is that the 1/1 isolated agents are hog intestinal viruses. References

YUGOSLAVIA

MASIC, M.; ERCEGAN, M.; PLAVEC, V.; and PETROVIC, M., of the Pasteur Institute (Pasterov Zavod), Veterinary Institute (Veterinarski Institut), and Main Regional Hospital (Glavna Pokrajinska Bolnica), all in Novi Sad.

"Research on Enzootic Pneumonia in Hogs, II."

Belgrade, Veterinarski Glasnik, Vol 17, No 7, 1963, pp 579-587.

Abstract: [Authors' English summary modified] The authors' attempts to isolate the causative agent of the aforementioned disease on cultures of the tissues of piglets' lungs were without cytopathic effect and without any evidence of propagation. The experimental animals were slaughtered between the 14th and 189th days after inoculation, permitting study of the evolution of the macroscopic and microscopic lesions of the disease, which are described in some detail. Virus influence was excluded through inoculations of hog lung suspensions in chicken embryos. The authors often noted the Aujeszky disease in the piglets as an influenza-like syndrome, which was excluded with inoculations from mice and rabbits. The authors express their debt of gratitude to Dr. A.O. BETTS [affiliation not given].

Twenty references, mainly Yugoslav.

1/1

- 7 -

MASICA B.

POLAND/Electronics - Vacuum Techniques

H-9

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 11203

Author : Masica B.

Inst : Institute for Physics of Vacuum Tubes, Poland

Title : High Sensitivity Ionization Manometer for Measurement of Low Pressures

Orig Pub : Elektronika, 1957, 3, No 8, 310-312

Abstract : Description of an ionization manometer, whose lower measurement limit is approximately 2×10^{-7} mm mercury.

Card : 1/1

S/275/63/000/001/006/035
D469/D308

AUHTOR: Masica, Bogusław

TITLE: Omegatron, a gas analyzer

PERIODICAL: Referativnyy zhurnal, Elektronika i yeye primeneniye, no. 1, 1963, 15, abstract 1A 65 (Prace przemysł. inst. elektroniki, v. 1, no. 1, 1960, 49-69 (Pol.; summaries in Eng. and Rus.))

TEXT: Description of the omegatron, suitable for quantitative analysis of residual gases with masses $M < 100$ atomic weight units, under pressures $< 5 \times 10^{-5}$ mm Hg. Experiments have shown that the instrument may be used in vacuum systems for the analysis of light gases, e.g. H_2 , He, H_2O , O_2 , CO_2 , Ar, N_2 . Omegatrons may be used to separate masses which differ by one unit in the range $1 < M < 50$; it is possible to separate masses up to $M = 200$ (ion Hg^+) but with a reduced accuracy. Analysis of gases with higher atomic masses is possible, bearing in mind smaller sensitivity of the instrument.

Card 1/2

Omegatron, a gas analyzer

S/275/63/000/001/006/035
D469/D308

The theory of instrument is given. 13 references.

ASSOCIATION: Przemysłowy Inst. Elektroniki, Poland
[Abstracter's note: Complete translation.]

Card 2/2

S/275/63/000/001/005/035
D469/D308

AUTHOR: Masica, Bogusław

TITLE: Quantitative analysis of residual gases in vacuum systems with the help of of omegatron

PERIODICAL: Referativnyy zhurnal, Elektronika i yeye priemeniye, no. 1, 1963, 14-15, abstract 1A 64 (Prace przemysł. inst. elektroniki, v. 2, no. 2, 1961, 19-42 (Pol.; summaries in Eng. and Rus.))

TEXT: A mass-spectrometer of omegatron type, which has been described several times, can be used for qualitative and quantitative analysis of gas mixtures. The analysis is based on the principle of superposition; introduction of ions of one gas does not influence the ionization and deviation of ions of another gas. Experiments with quantitative analysis of residual gases are described. The calibration of omegatron was made on a special installation when known quantities of pure gases (helium, argon, neon, hydrogen, carbon dioxide and carbon monoxide) were introduced. The calibration

Card 1/2

Quantitative analysis of ...

S/275/63/000/001/005/035
D469/D308

results are quoted in tables and graphs. The investigations with gas mixtures have enabled establishment of optimal conditions for qualitative analysis. 14 references.

ASSOCIATION: Przemysłowy Inst. Elektroniki, Poland
/ Abstracter's note: Complete translation. /

Card 2/2

MASICA, Boguslaw

Gases evolved from vacuum tubes under vacuum conditions. Przegl
elektroniki 3 no. 5:235-238. My '62

1. Przemyslowy Instytut Elektroniki, Warszawa.

45279
Z/037/62/000/005-6/039/049
E073/E139

90110

AUTHOR: Masica, B.
TITLE: On gas desorption from electron tube components during their operation

PERIODICAL: Československý časopis pro fysiku, no.5-6, 1962, 665-667

TEXT: The composition of residual gases in electron tubes with a directly heated oxide cathode and two anodes, both during activation and normal operation, was studied. One of the anodes was used solely for activation, the other solely for measuring the quantity of the released gases. In addition, an omegatron was used with an oxide cathode, the temperature of which was near to that of the cathode under investigation. To elucidate the processes taking place in the tube, it was also necessary to measure the quantity of gases released from the individual electrodes by the impinging electrons. Degassing the vacuum system and the electron tube was effected by heating to 420 °C for 4 hours, that of the metal parts by H.F. heating; the cathodes of the omegatron and the electron tube were also degassed. At a pressure of
Card 1/4

On gas desorption from electron ...

Z/037/62/000/005-6/039/049
E073/E139

10^{-9} mm Hg in the system, with the cathodes in operation, the tube was closed with a stopper containing a capillary, the cross-section of which was so chosen that gas desorption rates of 10^{-11} to 10^{-6} mm Hg.litre/sec could be measured. Fig.1 shows the change in the composition of the residual gases as function of the operation time of the electron tube; Fig.3 shows the gas release resulting from bombarding the nickel anode with a constant input of 1 W. Fig.4 shows the dependence of the rate of gas release on the anode voltage. It is obvious from Fig.4 that the desorption depends on the energy of the electrons. During electron bombardment of the anodes, gases are desorbed primarily from the surface layers of the metals. Desorption of gases due to thermal diffusion is low. This indicates that the concentration of gases at the surface differs from that in the depth. Investigations are continuing on desorption of gases from the anodes during electron bombardment, formation of hydrocarbons on the surface of the oxide cathodes and the influence of these processes on the emission properties of the cathodes. There are 4 figures.

ASSOCIATION: Průmyslový ústav elektroniky, Varšava
(Industrial Electronics Institute, Warsaw)

Card 2/4

On gas desorption from electron... 2/037/62/000/005-6/039/049
E075/E139

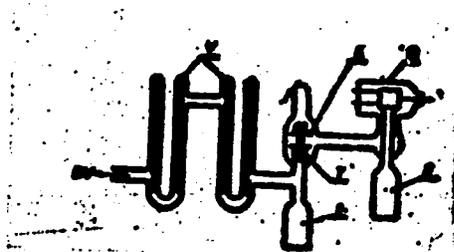
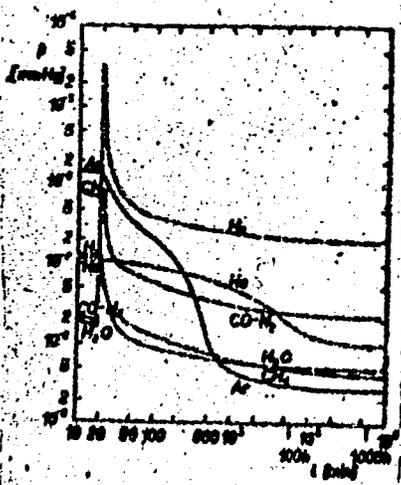


Fig. 1.1.1.4 (pp. 65/6) etc

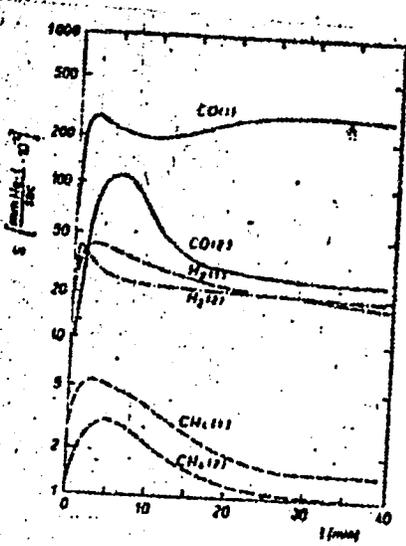
Card 3/4

Fig. 1

On gas desorption from electron ...

Z/037/62/000/005-6/039/049
R073/R139

Handwritten notes: *Handwritten text, possibly "Handwritten Results" or similar, written vertically on the right side of the page.*



Card 4/4

Fig. 3



Fig. 4

MASICA, B.

A simple omegatron with additional trapping voltage. Bul
Ac Pol tech ll no.1:33-39 '63.

1. Industrial Institute of Electronics, Warsaw. Presented by
J.Groszkowski.

PERCHIK, A.I.; MASICH, V.I.

Taking samples from wells using testers in the process of drilling.
Burenie no.1:25-28 '65. (MIRA 18:5)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut
neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina
i trest "Stavropol'burneft".

MASICH, V.I.; PERCHIK, A.I.; SHANDIN, S.N.

Analyzing the organization of work done on the testing and sampling of wells of the Middle-Volga Council for the National Economy.

Buroenie no.8:23-25 '64.

(MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut burovoy tekhniki; Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina i Gosudarstvennyy komitet po neftedobyvayushchey promyshlennosti.

32(2)

SOV/112-59-5-9145

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 5, p 105 (USSR)

AUTHOR: Masich, V. N.

TITLE: Temperature Conditions of Automobile Electrical Equipment

PERIODICAL: Avtotrakt. elektrooborudovaniye, 1958, Nr 2, pp 46-52

ABSTRACT: In 1956, NII Avtopriborov (Scientific-Research Institute of Automobile Equipment) started an investigation of temperature conditions of the electrical equipment operating in ZIL-150, GAZ-51, M-20, and MZMA-402 automobiles. The temperatures were mainly measured by thermistors and MMV bridges with an error of about $\pm 5\%$. Attention was chiefly paid to measuring temperatures under the hood as that place represents the ambient temperature for the principal electrical equipment. The highest temperature under the hood was observed in driving an automobile over a bumpy dirt road, a somewhat lower temperature (by 3°C on the average) in city driving, still lower in highway driving. With a speed variation, 30-80 km/hr, in third gear, the air

Card 1/3

SOV/112-59-5-9145

Temperature Conditions of Automobile Electrical Equipment

temperature has the greatest effect on the temperature under the hood. With equal load, the overheating of generator parts during city driving is lower than that during highway driving; this can be explained by frequent motor operation with a low speed of the crankshaft and, consequently, dropping the generator power to zero. As the generator is cooled by its own fan, the heating of its parts is independent of the motor fan; for that reason, in winter, when the external ventilation decreases because of the closed louver, the heating of the armature and commutator is equal to that in summer. The temperature rise of the armature winding of a G21 generator at 18 amp is 95-110°C, that of a G12 generator, 65-75°C. Average duration of heating the generator lies between 1-1.5 hr for various types. The temperature rise of an RR20 voltage regulator at full load lies within 35-45°C for various automobile types. The miniature relay of the RR24 regulator heats up higher. The ignition coil temperature depends on the speed of the distributor shaft: with higher speeds,

Card 2/3

SOV/112-59-5-9145

Temperature Conditions of Automobile Electrical Equipment

the temperature is lower. For 6-cylinder motors, the ignition coil temperature is higher by 11-13°C than that for 4-cylinder motors as measured in the actual automobile; it is 6-10°C higher as measured on the test stand.

G.I.G.

Card 3/3

ZAKHARCHUK, Zakhr Ivanovich; MASICH, Vladimir Ivanovich; VATOLIN, G.N.,
vedushchiy red.; VORONOVA, V.V., tekhn. red.

[Packers and anchors; design and use] Pakery i iakori, konstruktsii
i oblasti primeneniia. Moskva, Gos.nauchno-tekhn.izd-vo nefi.i gorno-
toplivnoi lit-ry, 1961. 78 p. (MIRA 14:12)
(Oil wells—Equipment and supplies)

MASICKA, Halina

(Gdansk-Oliwa)

Characteristics of the shore cliffs of the southern Baltic.
Wszeczwiat 7/8s161-166 JI-Ag'64.

MASICKA, Halina; KOWALIK, Zygmunt

Dynamics of the ripple-mark formation in the coastal zone.
Acta geophy Pol 10 no.3:251-262 '62.

1. Stacja Morska, Zaklad Geofizyki, Polska Akademia Nauk, Sopot.

LOZINSKI, Jan; MASICKA, Halina

Studies on heavy minerals in the shore sands of Danzig Bay.
Rocz geol Krakow 32 no.4:579-599 '62.

1. Stacja Morska Polskiej Akademii Nauk, Sopot, i Katedra
Mineralogii i Petrografii, Uniwersytet Jagiellonski, Krakow.

APUNIEWICZ, Sławomir, mgr inż.; MASIEWICZ, Antonio, mgr. inż.

In general, on track circuits and the structure of rail joints. Przegl kolej elektrotech 10 [i.e.15] no.11:307-312 N°63.

APUNIEWICZ, Sławomir; MASIEWICZ, Antonio

Track circuit feeding with increased frequency current.
Przełk kolej elektrotech 15 no.2:39-44 F '63.

DABROWA-BAJON, Miroslawa, mgr inz.; MASIEWICZ, Antonio, mgr inz.

Train traffic control installations in Japan on the Tokio -
Osaka railway line. Przegl kolej elektrotech 11 no.7:217-
222 J1 '64.

MASIF, I., ing.

Some technoeconomic problems of leather industry. Industria
uscara 3 no.7:262-265 Ag [1.e.J1] '56.

MASIF, I., ing.

The raw-hide pinions. Industria usoara 3 no.11:460-462 N
'56.

MASIF, R.

Sole-edge cutting and ironing machines. p. 187.

INDUSTRIA USOARA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din
România si Departamentul Industriei Usoare din Ministerului Industriei
Bunurilor de Consum) Bucuresti, Rumania; Vol. 6, no. 5, May 1959.

Monthly List of East European Accessions (EEAI) IC Vol. 8, No. 9, ^{Sept.}1959

Uncl.

MASIP, Radu, I., ing.

Hard chroming , a means for increasing the durability of
stamping and dripforging tools. Industria usocara 8 no.8:
330-331 Ag '61

MASIF, Radu, M., ing.

Calculation methods used in determining consumption norms for footwear side leather. Industria usoara 8 no.7:268-271 J1 '61.

MASIF, Radu M., ing.

Leather splitting machines. Industria usoara 9 no.12:526-529
D '62.

MASIF, Radu M., ing.

Drying of wood for lasts, an important factor for the improvement
of the quality of shoes. Industria usoara 10 no.1:10-13 Ja '63.

MASIF, Raoul M., ing.

Standardization helping introduction of new technics and better
quality in the light industry of Rumania. Industria usoara
9 no.3:81-86 Mr '62.

MASIF, Raoul M., Ing.

New technological methods for the reconditioning of tools and spare parts. Industria usocara 9 no.6:226-229 Je '62.

MASIF, Raoul M., ing.

Drying tanned leather and footwear. Industria ussara
9 no.9:366-369 3 '62.

MASIF, Raoul M., ing.

New methods for determining the quality of leather
replacement materials. Industria usocara 10 no.7:307-309
J1 '63.

MASIF, Raoul M., ing.

Methods of economizing sheet materials used in the cutting
out of shoes. Industria usoara 10 no.8:353-355 Ag'63

MASIK, A. KH.

MASIK, A. KH. -- "Investigation of the Effect of Preliminary Passivation of Metal on the Improvement of the Quality of Galvanization." Min Culture USSR, Khar'kov Polytechnical Institute imeni V. I. Lenin, Khar'kov, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 43, October 1956, Moscow

MASIK, A. Kh.

KADANER, L.I.; MASIK, A.Kh.

Effect of porosity on the corrosion rate of anode platings. Zhur.
prikl.khim. 30 no.5:796-799 My '57. (MIRA 10:10)
(Electrolysis) (Corrosion and anticorrosives)

MASTER COPY

Corrosion resistance of electrolytic coatings deposited on a
passivated surface
Zhur. Priklad. Khim. 30 (1957) 1000-1002
50% H₂O₂; 50% H₂SO₄; 50% H₂SO₄; 50% H₂SO₄; 50% H₂SO₄; 50% H₂SO₄
coated by an electrolytic deposit of zinc or cadmium
due to an increased rate of corrosion
protection of the passivated surface
further investigated

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MASIK, A. KH.

PHASE I BOOK EXPLOITATION SOV/2216

niye po elektrokimii. 4th, Moscow, 1956.
i (sborniki) (Transactions of the Fourth Conference on Elect-
istry; Collection of Articles) Moscow, Izd-vo AN SSSR,
888 p. Errata slip inserted. 2,500 copies printed.
ng Agency? Akademiya nauk SSSR. Otdeleniye khimicheskikh

1 Board: A.M. Frumkin (Resp. Ed.) Academician, O.A. Yesin,
sori S. I. Zhdanov (Resp. Secretary), M. Kabanov, Profes-
S. I. Zhdanov (Resp. Secretary), M. Kabanov, Professor
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M. Florianovich; Ed. of Publishing House: M.G. Yegorov;
Ed.: T.A. Prusakova.

This book is intended for chemical and electrical engi-
nists, metallurgists and researchers interested in
physics of electrochemistry.
The book contains 127 of the 138 reports presented at
Fourth Conference on Electrochemistry sponsored by the Depart-
of Chemical Sciences and the Institute of Physical Chemistry,
of Sciences, USSR. The collection pertains to different
has of electrochemical kinetics, double layer theories and
nic processes in metal electrodeposition and industrial elect-
is. Abridged discussions are given at the end of each divi-
The majority of reports not included here have been
shed in periodical literature. No personalities are mentioned.
ences are given at the end of most of the articles.

O.A. E. I. Urubkova, V. A. Kuznetsova, and A. Ya. Porokhunov
oduction of High-Purity Zinc by the Method of Electrolytic
rification 558

S. Ya. Galvanic Films From Complex Ammonia and Ammonium
ctrolytes 561

ason [Yu. V. Lyulov, B.S. Krasikov, B. Ya. Kaznachev,
Ez-ranchuk, M. V. Oudin, A.M. Ozerov and contributing
thers] 564

T VI. PASSIVITY OF METALS AND CHEMICAL ADSORPTION LAYERS 577

ffer, L.F. (deceased) (Germany). Activation of Pass-
e Iron 579

Yrkin, Ya. M.; V. M. Kuznetsov, and M. Ya. Buser (Physi-
chemical Institute of AN SSSR, L. Ya. Karpova). Anodic Pass-
ation of Metals in Aqueous Solutions of Electrolytes 594

MASIK, A.Kh., kand. tekhn. nauk; ZUYEVA, R.M.

Corrosion of steel in lime-tripoline binder. Stroi.mat. 10 no.8:18-19
Ag '64. (MIRA 17:12)

L 02367-67 EWT(m)/EWP(t)/ETI IJP(c) JD/HW/WB

ACC No: AP6031945

SOURCE CODE: UR/0080/66/039/009/1956/1959

AUTHOR: Kadaner, L. I.; Masik, A. Kh.; Peregudov, F. M.; Bakalyuk, Ya. Kh. 49
B

ORG: none

TITLE: Increasing the adhesion strength of metal coatings by [base metal] passivation

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 9, 1966, 1956-1959

TOPIC TAGS: steel passivation, copper ~~coating~~, nickel ~~coating~~, iron ~~coating~~,
aluminum ~~coating~~, ~~coating~~ adhesion ~~strength~~, ~~passivated steel coating~~ METAL
COATING, ELECTROLYTIC DEPOSITION

ABSTRACT: The effect of passivation of the steel base on the adhesion strength of copper, nickel, iron and aluminum coatings deposited by electrolysis or by hot dipping has been investigated. Steel specimens were passivated in concentrated nitric acid at 4-8C or in an aqueous solution containing (g/l) NaOH-150, Na NO₂- 300, Fe₂(SO₄)₃· 9H₂O - 5 at 106-114C for 8-12 sec. Copper coatings, deposited on steel passivated in nitric acid, had a high adhesion strength. The average value of the separation work was $1.73 \cdot 10^6$ erg/cm² compared with $0.63 \cdot 10^6$ erg/cm² for coatings deposited on nonpassivated specimens. The corresponding values for nickel coating on steel were $5.01 \cdot 10^6$ erg/cm² and $2.49 \cdot 10^6$. The separation of electrolytically deposited iron coatings occurred, as a rule, at the boundary between the base metal and the coating. Anodic passivation of steel in 30% sulfuric acid solution for 2 min slightly increased

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UDC: 621.357

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ACC NR: AP6031945

the adhesion strength of iron coating to 6.28 kg/mm². Passivation in sulfuric-acid solution with 20 g/l chromite increased the adhesion strength to about 10.57 kg/mm². Aluminum coatings after preliminary passivation had adequate adhesion strength. In general, the passivation increases the adhesion strength of coatings deposited by electrolysis or by hot dipping.

SUB CODE: //,13/ SUBM DATE: 02Sep64/ ORIG REF: 008/ OTH REF: 001

Card 2/2

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MASIK, M.G.

MASIK, M.G.

Etiology of pernicious anemia from the point of view of I.V.Pavlov's concepts. Medych.shur. 21 no.6:77-79 '51. (MIRA 11:1)

1. Z kafedri fakul'tets'koy terapii (sav. - prof. M.L.Aviocop) Stanislava'kogo medichnogo institutu (direktor - dotsent Yu.G. Antonov)
(ANEMIA)

USSR/Blood and Hematopoietic Organs

S-2

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21702

Author : Masik, M.G.

Inst : Not Given

Title : Peripheral Blood Picture in Goiter

Orig Pub : Vrachbn. dolo, 1956, No 1, 89-90

Abstract : A blood study was made of 173 patients with endemic goiter. Only a certain tendency to anemia of the normochromic type as well as a slight leukopenia and neutropenia was noted.

Card : 1/1

MASIK, M.G.

BORIN, Ya.V., professor; MASIK, M.G., dotsent

Some problems in the clinical aspects and pathogenesis of subacute
septic endocarditis. Vrach.delo no.7:673 J1 '57. (MLRA 10:8)

1. Klinika gospiatal'noy terapii (zav. - prof. Ya.V.Borin)
Stanislavskogo meditsinskogo instituta
(~~ENDOCARDITIS~~)

MASIK, M.G., dotsent

Sixth point in cardiac auscultation. Vrach.delo no.6:651-653
Je '58 (MIRA 11:7)

1. Propedevticheskaya terapevticheskaya klinika (zav. - dots. M.G.
Masik) Ternopol'skogo meditsinskogo instituta.
(AUSCULTATION)

MASIK, M.G., dots. (Stanislav)

Case of familial hemorrhagic capillaropathy, (Willebrand-Jürgen's
disease), *Klin.med.* 36 no.5:146-148 Ky '58 (MIRA 11:7)

1. Iz gosptal'noy terapevticheskoy kliniki (sav. prof. Ya. V.Borin)
Stanislavskogo instituta.

(HEMORRHAGIC DIATHESIS, case reports,
Willebrand-Jürgen dis. (Rus))

MASIK, H.G., dotsent; DZIS', I.P.

Spontaneous rupture of the spleen in acute aleukemic myelosis. Vrach.
delo no.10:113-114 0 '60. (MIRA 13:11)

1. Kafedra propedevticheskoy terapii (zav. - dotsent M.G.Masik)
i kafedra patologicheskoy anatomii (zav. dotsent N.I.Val'chuk)
Teropol'skogo meditsinskogo instituta.

(Marrow--DISEASES)

(Spleen--RUPTURE)

MASIK, M.G., dotsent; BARBA, Ye.I., dotsent

Comparative evaluation of the effectiveness of some methods of treating lymphogranulomatosis. Problemy gemat. i perel. krovi 8 no.8:57 Ag '63. (MIRA 17:8)

1. Iz kafedry propedevticheskoy terapii (zav. -- dotsent M.G. Masik) ternopol'skogo meditsinskogo instituta.

MASILKO, Karel

Automated line for pastry production from the technological viewpoint. Prum potraviv 14 no.7:353-354 JI '63.

1. Vyzkumny ustav mlynskeho a pekarenskeho prumyslu, Praha.

MASILYEVA, O.I.

Estimating the effectiveness of the use of vitamin B₁₂ in the food rations of hens and chicks. Vit. res. i ikh isp. no.5:283-309 '61.
(MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsevodstva
Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina.
(CYANOCOBALAMINE) (POULTRY FEEDING AND FEEDS)

MASILYUNAS, A., inzh.

Is electrode vibration needed in the building-up of parts? Avt.
transp. 42 no.9:30-32 S '64. (MIRA 17:11)

MASIN, A.

The production of office machines in Czechoslovakia.

p. 115 (Jemna Mechanika a Optika. Vol. 2, no. 4, Aug. 1957. Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

MASIN, A.

New office equipment displayed at the fair in Hannover.

P. 186. (JEMNA MECHANIKA A OPTIKA) (Praha, Czechoslovakia) Vol. 2, No. 6, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, May 1958

MASIN, ALOIS

CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties of
Crystals and Polycrystalline Substances

E-10

Abs Jour : Ref Zhur - Fizika, No 4, 1958, No 8398

Author : Masin Alois, Tlusta Dagmar

Inst : Not Given

Title : Effect of Impact Deformation on the Occurrence of Martensitic
Platelets.

Orig Pub : Ceskosl. casop. fys., 1956, 6, No 2, 225-226;

Abstract : See Referat Zhur Fizika, 1957, No 11, 28013

Card : 1/1

MASIN, A; ~~XXXXXXXX~~

MASIN, A; ~~XXXXXXXX~~. Study be measurement of electric resistance at-193C. of the kinetics of aging after cold deformation. Pt. 1. p333. Vol. 6. no. 3, May 1956. CESKISLOVENSKY CASOPIS PRO FYSIKY Praha, Czechoslovakia

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4 April 1957

MASIN, A.

POLAND/Solid State Physics - Phase Transition in Solids

E-6

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 15610

Author : Masin A., Havel, V., Tlusta D.

Inst : ~~NOT GIVEN~~

Title : A Study of the Connection Between the Martensite and the Non-needle-like Structure Occurring Along with the Martensite in an Alloy of Iron Manganese and Carbon, Using the Bitter-Akulov Method.

Orig Pub : Bull. Acad. polon sci., 1957, Cl 4, 5, No 3, 181-184

Abstract : In a metastable austenitic steel containing 1% carbon and 5% manganese, after quenching from 1150° C and further cooling in a temperature range below 0°C, causing a martensitic transformation, there was observed the presence of a non-needle-like structure in addition to the normal martensite. On the basis of microscopic investigation of the structure and the use of the magnetic metallography method it is stated that the non-needle-like portions consist of very small platelets of martensite or else of small particles having ferromagnetic properties analogous to the properties of martensite.

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MASIN, A.

POLAND/Solid State Physics - Phase Transitions in Solids

E-6

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 15611

Author : Masin A.

Inst : Not Given

Title : Appearance of Martensitic Series in an Iron-Manganese-Carbon Alloy

Orig Pub : Bull. Acad. polon. sci., 1957, Cl. 4, 5, No 3, 185-190

Abstract : A metallographic investigation was made of the structure of the metastable austenitic steel containing 1% and 5% manganese after quenching from 1100°C and subsequent cooling in the range from 0 to -78°C. A gradual development of a martensitic transformation was observed, and the precipitated martensite is arranged in gradually expanding series, parallel to the long axis of the specimen. The line-like character of the precipitation of the martensite is attributed to a liquation inhomogeneity in the dissipation of the manganese and carbon in the alloy. It is proposed that the origin of the non-needle-structure, previously observed in this alloy along with

Card : 1/2

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CZECHOSLOVAKIA/Solid State Physics - Structural Crystallography. E

Abs Jour : Ref Zhur Fizika, No 12, 1959, 27346
Author : Masin, Alois; Jiskra, Zoleneck
Inst : Ocelarsky Vyzkumny ustav HMD; Vyzkumny ustav dopravný
res. ustav ministerstvadopravy, Prague
Title : X-Ray Goniometer for the Investigation of the Textu-
res of Crystals in Polycrystalline Metals.
Orig Pub : Mat.-fyz. casop., 1958, 8, No 4, 241-250
Abstract : The authors describe a texture goniometer, in which
a sample can be rotated about an axis perpendicular to
the primary beam; and the cylindrical film, the axis
of which coincides with the primary beam, can move in
translation parallel to its own axis. The rotations
of the sample and the translational motion of the
film are synchronized. The motion of the sample and

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11. VIASIN

Distr: 4E2b(v)/4E2c(j) 14

Heat treatment of polyamide/pressure die castings. 1. Hilken, Z. Tlesák, and A. Mašín (Vězk. Ústav dopravní, Prague). *Strojářství* 8, 525-7 (1958) (English summary).
 Samples of polycaprolactam (I) (degree of polymerization 138, H₂O content 5.3%, low-mol. ingredients 6.4%) were tempered in oil or in water at various temps. and time periods. The hexagonal I changed to monoclinic only at temps. above 170°. The hardness of I increased with the length of the treatment. When water was used (temp. 90-100°) the increase was much smaller and was attributed only to elimination of internal stresses and to a partial hydration of I. Substantial changes in the structure of I were achieved by oil treatment (temp. above 170°) and subsequent boiling in water (120 min.).
 Alexej B. Holkovec

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11/27/44, 11/28/44

Distr: 482c

Experimental evidence for the existence of edge dislocations on the boundaries of tempered martensite crystals. *Alain Martin (Dent. Fratic, France). Naturewissenschaften* 43: 1968; cf. C.A. 51, 13700c. — An Fe alloy (contg. 1.6% C, 0.01% C₂, and N 0.008%) was heated to 850° for 5 hr., cooled slowly, heated to 620°, and quenched in H₂O. The sample was smoothed to 1/16", polished electrolytically, and etched with saphran chloride in an ether soln. of picric acid. After a final polishing and rinsing with alc. and benzene, the sample was examd. with a Zeiss-Neophot microscope. The edges of the martensite crystals were characterized by discrete points, which showed discontinuities in the distribution of the impurity atoms. E. M. Vanage

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MASIN, A.

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CZECH/37-59-1-5/26

18.9000

AUTHORS: Vladimír Havel, Alois Mašín &

TITLE: Study of Bitter-Akulov Figures on an Iron-Chrome Alloy

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 1, pp 32-37
+ 2 plates

ABSTRACT: The Bitter-Akulov figures have been studied on an alloy containing 24% chrome. Structural changes during hardening and during annealing at 475 °C were studied. The samples contained 24% Cr, 0.14% C, 0.17% Ni, 0.44% Mn, 0.07% Cu, and 0.65% Si. Cylindrical samples of 8 mm diameter and 6 mm high were prepared. The samples were annealed in vacuum at 1100 °C for 4 hours and then rapidly cooled in water. Some of the samples were then annealed at varying temperatures and some isothermally annealed at 475 °C for 1 hour. The samples were metallographically polished and the surface was subjected to ion-bombardment. The ion-bombardment was used instead of etching (Ref 6). The Bitter-Akulov figures were studied by using a colloidal solution of Fe₂O₃ (Ref 8). The samples were polished again after ion-bombardment and then coated by the solution. Samples were also electrolytically polished. The magnetic field was perpendicular to the surface of the

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CZECH/37-59-1-5/26

Study of Bitter-Akulov Figures on an Iron-Chrome Alloy

sample. The structure of the annealed samples after ion-bombardment is ferritic with rows of precipitate carbides (Fig 2, p 116a). After hardening, large carbides with elongated shapes (Fig 3) appeared. Dislocations were also observed. Annealing at 475 °C for less than 110 hrs had no influence on the structure, while longer annealing led to the dissolution of the carbides (Fig 4). Annealing at 470 °C for 600 hours leads to precipitation of very small particles of carbides (Fig 5). The appearance of the Bitter-Akulov figures on the samples described above is shown in Figs 6-11. The carbide particles are non-magnetic and show up as white areas. On metallographically polished samples, a maze structure is shown in the vicinity of the carbides (Figs 6,7,11). On the actual face of the grains, deformed maze figures occurred (Fig 7). After electrolytic polishing, the maze structure near the carbides disappears and a needle-shaped domain structure (Fig 8) is observed. Prolonged ion-bombardment has the same effect as electrolytic polishing. Maze structure is due to stresses in the crystal (Refs 5, 9). The mechanically polished samples obviously

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CZECH/37-59-1-5/26

Study of Bitter-Akulov Figures on an Iron-Chrome Alloy

are strained. The vicinity of carbide precipitates on dislocations is an area of high strain and therefore leads to maze structure. By electrolytic etching, the deformed surface layer is removed and therefore a needle-shaped domain structure appears.

There are 11 figures and 9 references, of which 3 are German, 3 Czech, 1 Soviet and 2 English.

ASSOCIATION: Výzkumný ústav hutnictví Želena MHD, Praha
(Ferrous Metallurgy Research Institute MHD, Prague)(V.Havel)
and

Card 3/3 Výzkumný ústav dopravní MD, Praha
(Transport Research Institute, MD, Prague)(A. Mašín) 4

SUBMITTED: February 4, 1958

AUTHOR: Mašín, Alois

CZECH/37-59-3-24/29

TITLE: On the Maze Patterns of Martensite (Letter to the Editor)

PERIODICAL: Československý časopis pro fysiku, 1959, Nr 3, pp 328-329

ABSTRACT: The maze patterns on martensite cannot, unlike on iron containing silicon, be removed by electrolytic etching. This is explained as follows. The maze structure is due to compression (J. Kaczér - Ref 3). This compression of the martensite is due to its grains being embedded in austenite. Electrolytic etching does not remove the compression. There are 7 references, of which 2 are Czech, 3 Soviet, 1 English and 1 German.

ASSOCIATION: Výzkumný ústav dopravní, res. ústav min. dopravy, Praha (Ministry of Transport Research Institute, Prague)

SUBMITTED: January 31, 1959 ✓

Card 1/1

18(3), 18(7), 24(2)

AUTHOR: Masin, A.

SOV/126-7-2-27/39

TITLE: Microscopic Proof of the Direct Transformation of a Martensite Crystal into an α -grain on Tempering (Mikroskopicheskoye dokazatel'stvo neposredstvennogo prevrashcheniya kristalla martensita v α -zerno pri otpuske)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 2, pp 301-302 (USSR)

ABSTRACT: In literature dedicated to problems of tempering of martensite, one meets the statement that recrystallization of ferrite grain (α -grains) takes place during martensite decomposition. However, this statement has not been confirmed by any experiments and from the theoretical point of view it is completely unfounded, since as the result of exclusion of carbon atoms from martensite in the atomic lattice of which they are embedded, an equilibrium condition may set in directly. From the continuous progress of the tertiary stress changes, which had been investigated by X-ray methods by Moroz and Terminasov (Ref 1), the conclusion is possible that

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SOV/126-7-2-27/39

Microscopic Proof of the Direct Transformation of a Martensite Crystal into an α -grain on Tempering

For a direct solution of this problem, the following experiment was carried out. A roll, made from an iron - 1.3% carbon alloy, 8 mm diameter and 10 mm long, was oil quenched from a temperature of 1150°C and then plunged into liquid nitrogen (-196°C) in order to remove residual austenite. The face of the quenched specimen was ground and electrolytically polished for metallographic examination; the polished surface was etched in a solution of 1% nitric acid in ethyl alcohol. A characteristic spot was selected in the microstructure, which turned out to be purely martensitic, showing fully developed coarse martensite needles (Fig 1). Impressions were made around this spot by the micro-hardness testing instrument. The roll was then placed into a glass tube which was evacuated and sealed, and was tempered in an electric laboratory furnace at 660°C for 2 hours. After being cooled, the roll was removed from the tube and the spot bounded by the impressions was found again under the microscope (Fig 2). As can be seen

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SOV/126-7-2-27/39

Microscopic Proof of the Direct Transformation of a Martensite
Crystal into an α -grain on Tempering

from Fig 2, the α -grains formed fully coincide with the initial martensite needles, which fact excludes the possibility of recrystallisation having occurred on tempering. On the contrary, this points to a direct conversion of martensite crystals to α -grains. As regards carbon, which separates from martensite during the decomposition of the latter, it separates in the form of fine carbides along the boundaries of individual α -grains, as can be seen from Fig 2. The above statement is in complete agreement with results of electron microscopic investigations of structural changes occurring on tempering martensite (Ref 2). Observations have shown that the carbides, forming within the martensite needles in the initial decomposition stage, dissolve at higher tempering temperatures (above 500°C), and are subsequently precipitated along the α -grain boundaries, as in the case of the tempered martensite investigated by us. In conclusion, the author expresses his gratitude to Engineer Tlusta and V. Havel for the assistance given in carrying out the

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